# **Vermont Mental Health Performance Indicator Project**

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

#### MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project

Advisory Group and Interested Parties

FROM: John Pandiani, Bill McMains, and Sheila Pomeroy

DATE: August 29, 2003

RE: Children's Psychotherapeutic Medication

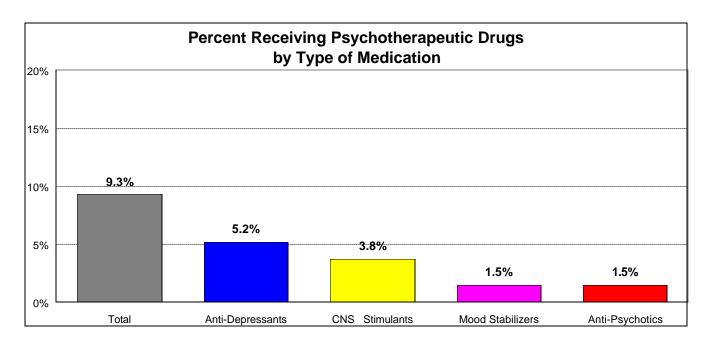
This week's PIP is in response to a request from the Children, Adolescent, and Family Unit State Program Standing Committee. The analysis reported here provides an overview of types of psychotherapeutic medication received, and demographic characteristics of the young people receiving the medication. The analysis focuses on all young Vermont residents (18 and under) who had Medicaid insurance coverage during calendar year 2002. For purposes of analysis, all 2002 paid claims for psychotherapeutic medications were linked to a Medicaid enrollee file to obtain demographic information about the young people who received psychotherapeutic medication. Medications were grouped into four broad categories and utilization rates for young people in different age and gender categories were determined. The attached graphs and table provide an overview of the results of the first round of analysis of this data set. A list of specific medications within each category, with descriptions of major uses and concerns is attached as well.

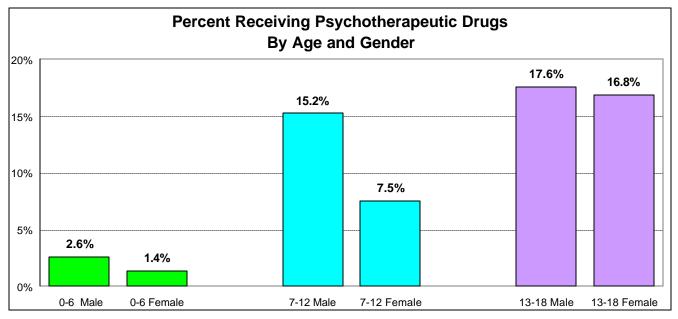
As you will see, more than 9% of all young people enrolled in Vermont's Medicaid program received psychotherapeutic medication during 2002. Males were more likely than females to receive psychotherapeutic medication (10.8% vs. 7.7%) and utilization rates increased with age: 2% for children under 7 years of age, 11.5% for 7 to 12 year olds, and 17.2% for youth in the 13 to 18 age group.

Antidepressant medications were the most commonly used (5.2% of all enrollees), followed by central nervous system stimulants (3.8%), mood stabilizers (1.5%) and anti-psychotic medications (1.5%).

We look forward to your comments, questions, and suggestions for future analysis <a href="mailto:pip@ddmhs.state.vt.us">pip@ddmhs.state.vt.us</a> or call 802-241-2638.

# Utilization of Psychotherapeutic Medication By Medicaid Enrolled Youth Vermont: CY 2002





Analysis based on extracts from the Vermont Medicaid Paid Claims database. Analysis includes children 0 to 18 years of age.

# Medicaid Enrolled Youth Receiving Psychotherapeutic Drugs Vermont 2002

				Psychotherapeutic Drugs							
		Total		Mood Stabilizers		CNS Stimulants		Anti-Depressants		Anti-Psychotics	
	Enrollees	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	72,853	6,782	9.3%	1,113	1.5%	2,739	3.8%	3,786	5.2%	1,105	1.5%
Male	37,272	4,043	10.8%	636	1.7%	2,054	5.5%	2,014	5.4%	762	2.0%
Female	35,581	2,738	7.7%	477	1.3%	685	1.9%	1,772	5.0%	343	1.0%
0-6	28,897	578	2.0%	143	0.5%	238	0.8%	116	0.4%	79	0.3%
7-12	23,733	2,725	11.5%	407	1.7%	1,501	6.3%	1,267	5.3%	478	2.0%
13-18	20,223	3,479	17.2%	563	2.8%	1,000	4.9%	2,404	11.9%	549	2.7%
0-6 Male	14,846	387	2.6%	84	0.6%	187	1.3%	86	0.6%	58	0.4%
0-6 Female	14,051	191	1.4%	59	0.4%	51	0.4%	30	0.2%	21	0.1%
7-12 Male	12,161	1,852	15.2%	253	2.1%	1,115	9.2%	847	7.0%	359	3.0%
7-12 Female	11,572	872	7.5%	154	1.3%	386	3.3%	419	3.6%	118	1.0%
13-18 Male	10,265	1,804	17.6%	299	2.9%	752	7.3%	1,081	10.5%	345	3.4%

248

2.5%

1,323

13.3%

204

2.0%

264

2.7%

13-18 Female

9,958

1,675

16.8%

# PSYCHOTROPIC MEDICATIONS FOR CHILDREN AND ADOLESCENTS

#### Anti-depressants

#### Major uses:

• Can relieve symptoms of several states: depression, anxiety, obsessive compulsive disorder, ADHD.

#### **Examples:**

• Tricyclics: Imipramine, Elavil [older drugs; numerous; similar in effect and

potential side effects].

• SSRIs: Prozac, Paxil, Zoloft [target one neurotransmitter].

• Others: Wellbutrin, Effexor [aim to target multiple neurotransmitters].

#### **Concerns:**

Tricyclics: Cardiac effects, suicide potential, seizure threshold is lowered.
 SSRIs: Fewer side effects, weight gain, sexual functioning, GI upset.

# Central Nervous System (CNS) Stimulants

#### Major uses:

- Control symptoms of ADHD behavioral interventions do not, but do other.
- Treat narcolepsy.
- Relieve symptoms of depression in brain trauma patients or elders.

#### **Examples:**

- Methylphenidate (Ritalin) [most studied drug].
- Dextroamphetamine.
- Adderall, Concerta.
- Stratera (non-CNS stimulant; new for ADHD and does not get abused).
- Dexedrine.

#### **Concerns:**

- Addiction and abuse.
  - Controlled substances.
  - Ritalin being abused increasingly.
  - Prescribed Ritalin may prevent abuse later with ADHD kids.
  - Dex is also abused.
  - Attempts to formulate others so cannot be abused.
- Learning impacts.
- Potential depression with long-term use in some children; use anti-depressants.

#### **Mood Stabilizers**

#### Major uses:

- Stabilize mood swings of bipolar illness.
- Decrease rage and/or high emotionality.

#### **Examples:**

- Lithium.
- Depakote (valproate) [has best record].
- Tegretol.
- Neurontin (gabapentin).
- Lamictil (lamotrigine).
- Topamax (topiramate).

#### **Concerns:**

- Lithium: Very effective, but optimal and toxic levels are very close; affected by illness, exercise, etc. so difficult to control; need to measure levels in blood].
- Others: Liver and blood problems.

# **Anti-psychotics**

#### Major uses:

- Decrease positive symptoms of psychosis.
- Decrease aggressive behaviors, independent of above [in kids, this is primary use].

### **\*** Examples:

• Typical: Haldol, Thorazine, Prolixin.

• Atypical: Clozaril, Risperdal, Olanzapine, Seroquel, Geodon, Abilify.

**Concerns:** 

• Typical: Neurological side effets, dyskinesias acute and tardive

Multiple organ impact, NMS.

• Atypical: Few neurological side effects

Other serious side effects: leukopenia, weight gain, diabetes

• All: Impact on developing brains?